



Chemical Demilitarization Citizens' Advisory Commission
Chemical Destruction Community Advisory Board
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Doug Hindman
Chair

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**Kentucky Chemical Demilitarization Citizens' Advisory Commission (CAC) and
Chemical Destruction Community Advisory Board (CDCAB) Meeting
Summary of Action Items and Discussions
March 3, 2021
Microsoft Teams Online Meeting
Richmond, Kentucky**

Attendees

CAC: Doug Hindman, Harry Moberly, George Ridings, David Stipes, April Webb (for Tammi Hudson) and Craig Williams

CDCAB: Robert Blythe, Col. Stephen Dorris, Dustin Heiser, Jeanne Hibberd, Doug Hindman, Ron Hink, Leslie Kaylor, Louise Locke (for Judy Greene-Baker), Tara Long, Bryan Makinen, Darcy Maupin, Harry Moberly, Stephanie Nelson (for U.S. Sen. Mitch McConnell), George Ridings, Mica Sims (for U.S. Sen. Rand Paul), Karl Slaughenhaupt (for Dr. Candace Coyle), Tyler Staker (for U.S. Rep. Andy Barr), David Stipes, Judge-Executive Reagan Taylor, April Webb (for Tammi Hudson), Craig Williams and Lt. Col. Edward Williams

Media Attendees:

WEKU-FM: Stu Johnson

The Richmond Register: Taylor Six

Meeting Synopsis

The meeting provided information on the following:

- Remarks from the Assembled Chemical Weapons Alternatives (ACWA) Program Executive Officer
- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Project Update
- Kentucky Department for Environmental Protection (KDEP) Permitting Updates

Meeting Summary Structure

This meeting summary is not intended to be a verbatim record of conversations; instead, it will provide an overview of the discussions and action items of government representatives and various members of the CAC and CDCAB. Key action items identified in the meeting and a synopsis of the major questions and comments discussed during the various updates are noted below. Copies of slides and documents presented during the meeting can be obtained from the Blue Grass Chemical Stockpile Outreach Office (ORO) at (859) 626-8944 or bgoutreach@iem.com.

Action Items

Action Item: Provide Craig Williams with an outline of the outreach plan for communicating with the local community at the hydrolysate receiving location.

Responsible Entity: Sarah Marko, communications manager, ORO.

Timeline: June 9, 2021.

Outline of Key Issues and Discussions

Welcome and Introductions – Sarah Marko, Communications Manager, ORO

Marko performed a roll call, welcomed the attendees, provided virtual meeting best practices and reviewed the meeting agenda.

Opening Remarks – Doug Hindman, Chair, CAC, and Reagan Taylor, Co-Chair, CDCAB.

Hindman said he was glad everyone could make it to the meeting and mentioned there had already been an ice storm and a flood in the first two months of the year.

Taylor welcomed attendees and said it was great to see everyone's faces, and that he cannot wait to get back to in-person meetings and put the pandemic behind us.

Marko then noted the following action items from the Dec. 9, 2020, CAC/CDCAB meeting:

Action Item	Steps Taken	Date/Status
Coordinate with other signatories to determine if the Supercritical Water Oxidation (SCWO) Memorandum of Agreement (MOA) may be shared with CAC/CDCAB members.	The MOA was distributed to CAC/CDCAB members with the Process Working Group meeting summary Jan. 29.	Complete.

Marko also noted an action item from the February Process Working Group (PWG) meeting to provide information on hydrolysate shipment and said that information will be provided in this meeting.

Key Updates

Remarks from the ACWA Program Executive Officer – Michael Abaie

Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or bgoutreach@iem.com.

Abaie said it was truly great for him to see everyone online, but he cannot wait until the COVID-19 pandemic is over. He said he was glad to hear some Kentucky COVID-19 numbers were starting to trend downward.

Abaie said some significant changes in Department of Defense leadership are taking place due to the presidential administration change and said the Secretary of Defense and his deputy have been confirmed. He said a lot of people below that level are in acting positions at this time and he is working to bring them all up to speed on the ACWA program.

Abaie then said BGCAPP is continuing to make good progress with the Explosive Destruction Technology (EDT) but it is a slow process as the munitions have been more problematic than anyone envisioned. He said the good news is that the campaign is well down the pipeline, with more than two-thirds of the mustard munitions destroyed. The VX campaign is progressing nicely, as well as the Rocket Handling System, and he tracks plant progress on a daily basis. He noted the plant is on schedule to start the next campaign, VX M55 rockets, in the fourth quarter of the current fiscal year (July-September 2021).

Abaie then moved to the hydrolysate shipment topic and said in their letter on the topic to him, the CAC/CDCAB asked for the evaluation of different technologies as well as information when the hydrolysate destruction contractor was identified. He said per the technologies question, in the 2013 time frame a study was done to evaluate what technologies were available for destroying hydrolysate, and no additional technologies since then have matured enough for consideration. The three technologies evaluated were biotreatment, deep-well injection and incineration. Biotreatment is currently being used at the Pueblo plant and was used for the Aberdeen plant, both to treat mustard-agent hydrolysate. He said biotreatment is much more problematic with the treatment of nerve agent hydrolysate and there was only one prototype developed, at Dupont in New Jersey, that never matured, and there is no ability to mature that technology now. As for deep-well injection, he said ACWA has never had a history with using deep-well injection and there are only about five facilities in the U.S. that accept commercial waste (there are a lot of others, but they are tied to their own facilities). He said the Environmental Protection Agency regulates the amount of solids and the pH level of deep-well injection

wastes, so there would have to be significant pre-treatment in order to dispose of nerve-agent hydrolysate in that manner. He said the real issues are the permitting and getting the Organisation for the Prohibition of Chemical Weapons (OPCW) to agree to its use. He said it does not seem like a very viable option. Abaie then said incineration has a very good track record from the safety and performance standpoint and ACWA used Veolia in Port Arthur, Texas, in 2018 and 2020 to destroy program hydrolysate. He said they do a great job and the OPCW recognizes them as a destruction facility. Abaie said ACWA worked with Bechtel Parsons Blue Grass (BPBG), who conducted their subcontracting process and selected Veolia. He noted Veolia had a significant weather impact over the winter and is focused on getting their facility back online and running well. ACWA is working with them on public outreach and will bring information on that back to the community.

Williams asked if the decision had been made to ship hydrolysate to Veolia. Abaie said ACWA made the recommendation to use incineration and BPBG made the decision to use Veolia. Williams asked if the decision to ship hydrolysate had been made at all levels. Abaie said yes. Williams asked if there was a projected schedule for the first shipment to Port Arthur. Abaie said no, the permitting must be worked through first, and late fall is the target to begin shipments.

BGCAPP Project Update – Karl Slaughenhaupt, Principal Deputy, BGCAPP, and Ron Hink, Project Manager, BPBG

Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or bgoutreach@iem.com.

Slaughenhaupt introduced himself and provided a BGCAPP COVID-19 update. He said management continues to monitor and adhere to strict protocols, and there have been about 168 COVID-19 cases out of the approximately 1,500 people on staff. He noted the plant maintained good processing during this time and they have not been able to attribute many cases to having been contracted on site. Slaughenhaupt said BPBG has a good contact-tracing system and they adopted modified staffing systems due to contact tracing. He then said about 840 people from BGCAPP, the Blue Grass Army Depot (BGAD) and Blue Grass Chemical Activity (BGCA) voluntarily received their first vaccinations and the second round should occur in a week or two. Hink said as of this date, there are zero positive cases in the workforce and 16 quarantined, which is much better than previously, but everyone remains vigilant and is following protocols.

Slaughenhaupt said the plant was in its third destruction campaign (VX projectiles) and had completed the ramp-up for VX projectile processing and was doing well. He said the mustard campaign was not going as fast as originally predicted, as the EDT had a longer-than-anticipated outage but it is now back under way. He noted the process is slow but steady and is being conducted safely and deliberately. Slaughenhaupt said the change-out of the EDT filtration system was performed successfully and without incident. He then said the VX campaign started in January and is progressing very well so far, with

the ramp-up being completed early, about 26% destruction of the VX projectiles at this point, and the first VX agent neutralization being conducted in February.

Rocket destruction equipment testing began in January with test rockets processed in automatic mode, and the site acceptance test is planned for next week, Slaughenhaupt said. Last week, the factory acceptance test for the Rocket Non-Destructive Examination (RNDE) system was completed and the equipment has been received at BGCAPP and is being installed. Marko played a video of the Rocket Warhead Containerization System (RWCS) for the group.

Slaughenhaupt then said the EDT had been having issues with the processing of the Levenstein mustard agent and was about 69% complete with that campaign, with completion possibly happening in August. He said Static Detonation Chamber (SDC) 2000 work is going very well and did not lose much time due to the weather challenges (rain, snow and ice storm). SDC components are expected to start arriving next week.

On the SCWO topic, Slaughenhaupt said management has been in contact with DEVCOM Chemical Biological Center (CBC) and has had initial conversations to finalize the study plan. CBC is reviewing technical documents and photographs. CBC is building their team to come to the site in March to learn about system failure events. He said management will provide quarterly updates on this topic through this venue or the PWG.

Following information provided by Abaie, above, on the treatment of hydrolysate, Slaughenhaupt said the submittal of the revised permit modification will be done in March and he expects KDEP approval in mid-to-late summer. The transfer station, previously put in place in 2019, soon will be connected and they are updating operating procedures for making shipments.

Regarding closure, Slaughenhaupt said the initial report has been submitted to Congress, and it lays out what the process is for communication with the local community. He said state representation will be conducted through the Kentucky Commission on Military Affairs. A closure working group is being established that will have representation from installation stakeholders such as BGAD, BGCA, BPBG and ACWA. He noted they are having early discussions with KDEP regarding pre-closure activities for the Munitions Washout System. Slaughenhaupt said they are starting to make initial plans and are not waiting to the end to start preparing for closure.

Williams asked if there are plans for the EDT once the mustard campaign is complete. Slaughenhaupt said it will be used to process VX rocket warheads, probably starting around the fourth quarter of 2022. Williams asked the projected start date for the SDC 2000. Slaughenhaupt said around August 2022, and they will start with the warheads to get a baseline, then do a brief overpack campaign before the full GB warhead campaign.

Williams said of the list of entities participating in the closure working group, he didn't notice any community participation, and asked if that was intentional or if there was no particular role for community participation in that body. Slaughenhaupt said it was felt best for the government to develop the initial plan, then use the PWG to give the

community the venue for participation. Abaie said he takes the community's input extremely seriously. He said ACWA needs to put the initial plans together then involve the community moving forward. The final decisions will ultimately be made by the governor of Kentucky and the Secretary of the Army, and having the community on board with their endorsement makes a lot of sense. He noted a lot of the closure processes are internal and are based on identifying and transferring processes. Williams said he appreciates the sensitivity, but based on past experience, he is hopeful the plan will not be so far along it will be difficult to adjust based on community input. He said he is cautious about things getting too far along so that it becomes a struggle to modify the plan. Abaie said Williams has his commitment, as in the other things that ACWA has done, that updates will be provided at PWG meetings and he is always available if there are questions.

Hink provided safety information and said the project continues to do very well, not just with fewer incidents, but the severity of those incidents is very low. He noted a loss of consciousness during a blood draw and insect stings as examples. He said there was one incident where a job box lid fell on an employee's head, which required sutures, but the worker is fine and those boxes have been removed from the plant. Hink said the ice and snow overwhelmed the project, with it being low on salt and nitrogen deliveries and other activities were difficult as controls froze up, but there were no injuries from dealing with those issues.

On the project's economic impact, Hink said they continue to spend and the numbers will come up a little as the result of SDC 2000 expenditures and labor. He provided the two standard slides on BPBG diversity and demographics and said he will continue to provide updated information but would like to move the slides to back-up status in the meeting package of information and not present on them each time as there is not much change to speak to each meeting. Hindman agreed. Williams said he had mixed feelings about it but could live with the decision. He said he feels it keeps people informed and sensitive to the topic, but it is okay with him to put them in the package.

Hink moved to recruiting and provided the events that had recently occurred. He said the pandemic presents challenges to recruiting, so they have had to hold events online, and they are still learning through the process. He noted a March 10 job fair at Eastern Kentucky University that did not make the slide and said they will continue to access local events as best they can and continue to recruit locally. Hink said one of the open positions, Battelle monitoring technician, is an entry-level job, where job holders may start there then move up, so they are usually looking for applicants for these positions. He said the engineers Amentum seeks are hard to find locally, so the project must look farther afield for positions such as these. Hink then provided information on how to apply for BGCAPP positions.

On community stewardship, Hink said because of the COVID-19 strain on the local community, BPBG has refocused locally and is supporting the local charities in their relief efforts. He said BPBG quickly responds to needs and supports the community and feels it has been successful. He said BPBG is also a big advocate of the military and veterans'

affairs department at Eastern Kentucky University and is looking forward to recruiting some cyber technicians from them.

Slaughenaupt said, in a wrap-up from his perspective, he has not seen the integration of the team as good as it is now. He noted the systems in place to communicate and work through challenges and said it is going very well. He said there have been some challenges but working groups have been established to work through them and said he couldn't be happier with the way things are going.

KDEP Permitting Update – Dale Burton and Monica Alden, BGAD Section, KDEP

Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or bgoutreach@iem.com.

Burton opened by saying KDEP is preparing to tentatively approve and place on public notice four major permit modification requests. He turned the presentation over to Alden to provide information on the requests. Alden said all four requests are related to processing changes for the nerve-agent rockets and provided information on each:

- 1) Rocket Warhead Containerization
 - a. Elimination of equipment in the Munitions Demilitarization Building (MDB) associated with the destruction of energetics in the nerve-agent rockets
 - b. Elimination of equipment in the SCWO Processing Building associated with destruction of energetics hydrolysate
 - c. Addition of a RWCS
- 2) Treatment of VX Rockets
 - a. Transport of M55 rockets containing the nerve agent VX from BGCA to the Container Handling Building
 - b. Treatment of M55 rockets containing VX in the MDB
 - c. Treatment of drained VX agent in the MDB and subsequent management of VX agent hydrolysate in the Hydrolysate Storage System tanks
- 3) Addition of Vertical Rocket Cutting Machines (VRCM). Alden said this equipment was necessary due to the age of the rockets and that some of them have warped in storage, and this system will cut them cleanly.
 - a. Substitution of four VRCMs for the two existing rocket cutting machines in the MDB
 - b. Addition of RNDE technology to evaluate M55 rockets for chemical agent liquid leaks prior to processing in the VRCMs
- 4) ACWA Transport and Storage of Nerve Agent-Related Wastes in the Chemical Limited Area (CLA)
 - a. Transfer of permit responsibility of CLA igloos from BGCA to ACWA

- i. Done in steps, as igloos are emptied of original stockpile munitions
- b. Transport of containerized VX and GB rocket warheads and other associated wastes via flatbed trucks from the BGCAPP Main Plant to the CLA igloos and then eventually from the CLA igloos to an SDC unit for destruction
- c. Storage of containerized VX and GB rocket warheads and other associated wastes in the CLA igloos. This includes laboratory wastes, overpacks and other items.

Alden then provided the owner and operator for each of the BGAD waste sections and said the ones in red (*BGCAPP Main Plant* and *Transport and Storage of Nerve Agent Wastes*—a new section of the permit to be added) were currently being modified. She gave the tentative schedule for the permit actions and said the public comment period will be from March 14 through April 28, with a virtual public meeting to be held April 21.

In closing, Alden said in addition to the current permitting action, KDEP is currently reviewing the following major permit modification requests:

- Application to ship hydrolysate to a permitted off-site treatment facility
- Application to store uncontaminated rocket motors in existing BGAD igloos
- Application to destroy nerve agent in the SDC 1200, including construction of an upgraded off-gas treatment system
- Application to destroy nerve agent in the SDC 2000.

Burton said drafting permits to adapt changes is where the real work on KDEP's part comes in, which takes the majority of their time. He said he appreciates all the work Alden and Ted Malone are doing on this. He then provided a quarterly permitting update of work conducted since the last CAC/CDCAB meeting, which included an extension of a Temporary Authorization Request for the SDC 2000 so they can continue to construct, systemize and test that equipment in advance of their operation; final approval for the start of VX projectile operations; the approval for a shipment of greater-than 117 Vapor Screening Level mustard waste to Veolia; and the provision of comments on several different permit requests. He noted the rocket motor storage involves BGAD storing rocket motors in up to 29 igloos outside the CLA as a buffer before their final destruction.

Williams asked what the procedure was for handling a leaking rocket that was detected before the shipping and firing tube was cut. Burton said the rocket will be separated from the process and overpacked and processed later as an overpack round. Williams asked if there was a robotic capability to adjust the procedure to overpack a leaking rocket in that section of the plant. Burton said yes, but it would not be an external leak at that point; it would be internal to the shipping and firing tube. John McArthur said if a leaker is detected in the RNDE process the rocket would be removed and put into a single-round container, then put back into storage for the overpack destruction process.

Slaughenhaupt said for a regular shipment from storage for processing, the igloo will be

monitored before shipment and the transportation container will be monitored before opening, and neither one of these methods would detect leaked agent contained within the shipping and firing tube.

Hindman said he wanted to comment on how much work Burton and Alden are doing in reviewing these permits and that it is nice to have the state doing this to make sure everything is done right. Burton said he appreciates the support from the community and KDEP is just doing its part of the mission. Abaie said it has been a challenge put on KDEP but they have done an excellent job of working with the program and letting them know what the issues are.

Closing Remarks – Doug Hindman, Chair, CAC; Craig Williams, Co-Chair, CDCAB; and Michael Abaie, Program Executive Officer, ACWA

Hindman said it had been a good meeting and he felt the project was moving along, with expected bumps and slow-downs.

Williams agreed and thanked Abaie for his attendance. He said he feels it is always good to hear from the one in charge and it sounds from Abaie's tone that things are moving along. He also thanked the outreach team, without whom, he opined, things would grind to a halt.

Abaie thanked the team for an outstanding job and the community for working with the program through significant changes. He also thanked KDEP and said he knows the project is challenging them, but they have been working well with the project. He lastly thanked BGAD and BGCA for collaboratively working well with the project and also for their help in getting vaccines for site workers. He then asked the community members to reach out to Marko or him if there were future issues.

Next CAC and CDCAB Meeting

The next meeting is scheduled for Wednesday, June 9, 2021, at 1:30 p.m. The meeting format has yet to be determined.

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